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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Complete If Known **Application Number** 10/010,601 Filing Date December 06, 2001 First Named Inventor Lakkis, Ismail Group Art Unit To Be Assign **Examiner Name** Attorney Docket Number 45389.00004.UTL

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				U.S. PATENT DOCU	MENTS .	
Examiner	Cite No.1	U.S. Patent Document	Name of Patentee or	Date of Publication of	Pages, Columns, Lines.	
Initials*		Number Kind Cod	e2 Applicant of Cited Document	Cited Document MM-DD-YYYY	Where Relevant Passages or Relevant Figures Appear	
机	7	AA	5,563,909	Nakazawa	10-08-1996	
1		AB	5,675,572	Hidejima et al.	10-07-1997	
		AC	5,949,813	Hunsinger et al.	10-07-1999	
		AD	6,049,707	Buer et al.	04-11-200	
J	1	AE	6,192,068 B1	Fattouche, et al.	02-20-2001	
$\Lambda$	$\Lambda$	AF	6,320,897 B1	Fattouche	11-20-2001	
4	1	AG	RE37,802 E	Fattouche	07-23-2002	

	-			FOREIGN PAT	TENT DOCUMENTS	3		
Examiner Initials	Cite No. <sup>1</sup>	Office <sup>3</sup>	Foreign Patont Do	curnent Kind Code' (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T 6
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NON PATENT LITERATURE DOCUMENTS							
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HN	AH	BINGHAM, JOHN A.C. "Multicarrier Modulation for Data Transmission: An Idea Whose Time Has Come" IEEE Communications Magazine, May 1990, Pages 5-14.					
HN	AI .	BLUM, RICK S. et al. "Improved Space – Time Coding for MIMO-OFDM Wireless Communications" IEEE Transactions on Communications, Vol. 49, No. 11, November 2001, pp. 1873-1878.					
HV,	LΑ	CHAUNG, JUSTIN et al. "Beyond 3G: Wideband Wireless Data Access Based on OFDM and Dynamic Packet Assignment" IEEE Communications Magazine, July 2000, pages 78-87.					
HN	AK	EDFORDS, OVE et al. "An introduction to orthogonal frequency-division multiplexing" September 1996, pp. 1-50					

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Complete if Known **Application Number** 10/010,601 Filing Date December 06, 2001 First Named Inventor Lakkis, Ismail 2631-26 **Group Art Unit Examiner Name** T<del>o be assigned</del> Attorney Docket Number 45389.00004.UTL

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the	AL	FOERSTER, JEFF et al. "Intel CFP Presentation for UWB PHY" IEEE P802.15 Working Group for Wireless Personal Area Networks, IEEE 802.15-03/109, March 03, 2003, pp. 1-53.	
AN)	AM	KELLY, JOY "Multi-band OFDM Physical Layer Proposal Update" IEEE P802.15 Working Group for Wireless Personal Area Networks, IEEE 802.15-04/0122r4, March 15, 2004, pp. 1-26.	
HN	AN	LEEPER, DAVID G. "Wireless Data Blaster: Radio's oldest technology is providing a new way for portable electronics to transmit large quantities of data rapidly without wires" Scientific American, May 2002, Pages 64-69.	
th	AO	PATTAN, BRUNO "A Brief Exposure to Ultra-Wideband Signaling" Microwace Journal, December 2003, pages 1-5.	
HD	AP	VANDANAMEELE, PATRICK et al. "A Combined OFDM/SDMS Approach" IEEE Journal on Selected Areas in Commmunications, November 2000, pp. 1-27.	
HW	AQ	WONG, CHEONG YUI et al. "Multiuser OFDM with Adaptive Subcarrier, BIT, and Power Allocation" IEEE Journal on Selected Areas in Communications, Vol. 17, No. 10, October 1999, pp. 1747-1758.	
W	AR	YE, ZHONG et al. "Throughput Analysis for a Packet Radio Network Using Rate Adaptive OFDM Signaling" IEEE International Conference on Communications, June 1999, pp. 1-7.	

		<del></del>
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